COLORIMETER WITH HIGH SNR

ABSTRACT OF THE DISCLOSURE

[0062] A colorimeter device and fabrication techniques are disclosed. The assembly and configuration of the device operates to maximize signal-to-noise ratio, as well as to provide an optimal field of view (e.g., such as an FOV that simulates that of the human eye). Geometric elements and features of the design, in conjunction with the assembly procedure, assure precise alignment of optical elements including sensors, filters, and other elements within the enclosure and optical path.